IMPLEMENTATION PANEL



Alan C. Lloyd, Ph.D., Chairman of the California Air Resources Board
Alan C. Lloyd, Ph.D. was appointed as Chairman to the California Air Resources Board by Governor Gray
Davis in February 1999 and reappointed by Governor Arnold Schwarzenegger in August 2004.

Dr. Lloyd most recently served as the Executive Director of the Energy and Environmental Engineering Center for the Desert Research Institute at the University and Community College System of Nevada, Reno. Previously, Dr. Lloyd was the chief scientist at the South Coast Air Quality Management District from 1988 to 1996, where he managed the Technology Advancement office that funded public-private partnerships to stimulate advanced technologies and cleaner fuels.

Dr. Lloyd was the 2003 Chairman of the California Fuel Cell Partnership and is a co-founder of the California Stationary Fuel Cell collaborative. He is a past chairman of the U.S. Department of Energy Hydrogen Technical Advisory Panel (HTAP).

Dr. Lloyd, 62, earned both his Bachelor of Science in Chemistry and Ph.D. in Gas Kinetics at the University College of Wales, Aberystwyth, U.K.



James D. Boyd, California Energy Commission Member

James D. Boyd was appointed to the California Energy Commission on February 6, 2002, by Governor Gray Davis. Commissioner Boyd presides over the Energy Commission's Transportation Fuels Committee and serves on the Electricity and Natural Gas Committee. Prior to his appointment, Commissioner Boyd was Chief of Staff to the California Resources Agency. He served 15 years as the Chief Executive Officer of the California Air Resources Board

He has been a government administrator for more than thirty years overseeing a variety of public health, environmental, natural resource, scientific, technical and administrative programs. A California native, Commissioner Boyd received his Bachelor of Science degree in Business Administration from the University of California, Berkeley.



Randell Iwasaki, Interim Director of the California Department of Transportation

Randell "Randy" Iwasaki is the Interim Director of the California Department of Transportation (Caltrans). Appointed by Governor Schwarzenegger in July 2004, Iwasaki is responsible for managing the day-to-day operation of California's state transportation system, including more than 50,000 lane miles of state highways stretching from Mexico to Oregon and from the Pacific Ocean to Nevada and Arizona.

A licensed civil engineer, Iwasaki has been with Caltrans for more than 20 years serving in a number of high profile engineering and management positions.

Prior to being named Interim Director, Iwasaki served as the Deputy Director for Maintenance and Operations, where he supervised nearly 6,000 maintenance employees and 1,600 traffic operations specialists. In addition, he was responsible for a 14,000-piece equipment fleet and Caltrans' New Technology and Research Program.



Cynthia Verdugo-Peralta, Air Quality Management Board Governing Board Member
Cynthia Verdugo-Peralta was appointed to the AQMD Governing Board by Governor Davis in April of
2000, becoming the first Hispanic female to assume this position. She was unanimously confirmed by the
Senate in April 2001, becoming the first individual to be confirmed to this position in approximately 11
years. She was reappointed by the Governor in March of 2003 and unanimously confirmed by the
Senate, in July 2003, to serve a second term.

Verdugo-Peralta is a CEC certified Energy Efficiency Specialist with 28 years experience in the utility industry, specializing in the areas of energy and the environment. She founded VPC Energy, Inc., an energy efficiency and environmental outreach firm, in 1989. Before becoming a Board Member, Verdugo-Peralta served on several AQMD technical committees since 1993; and managed several DOE energy efficiency and environmental small business programs.

Verdugo-Peralta currently serves on the Executive Board of Directors for the Asthma and Allergy Foundation of America and the Los Angeles Unified School District's Indoor Air Quality Advisory Board. She is past President of Professional Hispanics in Energy, a non-profit organization providing energy and environmental information to the Latino community.



Donald L. Paul, Vice-President and Chief Technology Officer of ChevronTexaco Corporation
Donald L. Paul is the corporate officer responsible for ChevronTexaco's four technology companies:
Exploration & Production Technology, Energy Research & Technology, Information Technology and
Technology Ventures. In this role, he coordinates their work to accelerate the development and integrated application of technology throughout the company's worldwide business activities. Paul participates as a member of ChevronTexaco's corporate committees on Strategy and Planning, Global Issues, Human Resources, and Audit.

Previously, Paul served as Vice-President of Technology and Environmental Affairs for Chevron Corporation, a position he assumed in 1996. In this role, Paul also was the corporate officer responsible for Chevron's worldwide health, safety, and environmental policy and compliance function.

A native of Los Angeles, Calif., he is a graduate of the Massachusetts Institute of Technology, with a bachelor's degree in applied mathematics, a master's degree in geology and geophysics and a Ph.D. in geophysics.

Jeffrey Lockett, California Area Manager, Air Products and Chemicals, Inc.



Martha Davis, Manager of Strategic Policy Development of the Inland Empire Utilities Agency
Ms. Martha Davis is the Manager of Strategic Policy Development and oversees the Water Resources
Department at the Inland Empire Utilities Agency (IEUA), a municipal water district serving 700,000
people in the western portion of San Bernardino County. IEUA provides regional sewage treatment
services, distributes imported water and recycled water supplies, and provides other utility services for the
Chino Basin. Previously, Ms. Davis served as the Executive Director for Californians and the Land (19982000) and for the Mono Lake Committee (1984-1996). Under her leadership, the Mono Lake campaign
culminated in a unanimous landmark public trust decision by the State Water Resources Control Board to
protect Mono Lake. Ms. Davis graduated from Stanford University cum laude with a degree in human
biology and received her master's degree from the Yale School of Forestry and Environmental Studies.
Since 1998, she has served as the Co-Chair of the CalFed Watershed Workgroup. Ms. Davis is currently
a board member for the Mono Lake Committee and the WateReuse Foundation, and is a member of the
Manzanar National Historic Site Advisory Commission. In addition, Ms. Davis serves as a member of the
California Bulletin 160 Advisory Committee and of the CALFED Bay Delta Public Advisory Committee.



Edward Kjaer, Director of the Electric Transportation Division of Southern California Edison Mr. Kjaer is responsible for all facets of the ET Division, (Electro-drive system impact and assessment, technology evaluation, customer education, EV rates and incentives, EPACT EV fleet vehicle compliance, etc.).

Previously, he was Director of the Automotive Division of Edison EV, a wholly-owned subsidiary of Edison Enterprises. Mr. Kjaer has held a number of key marketing positions in the automotive industry spanning over 15 years. From 1988-1996, he was the Corporate Marketing Manager at Mazda Motor of America. From 1985-1988, he worked on the Acura Automobile advertising account rising to Vice President at Ketchum Advertising. Prior to this, he ran the Nissan Advertising account in New Zealand and was a key member of the Datsun/Nissan "Name Change" Team.

As a native of New Zealand, Mr. Kjaer received his formal education attending Massey University focusing his studies on marketing and economics.

Richard M. Morrow, Vice-President of Customer Services-Major Markets for San Diego Gas & Electric (SDG&E) and Southern California Gas Company (SoCalGas)

Mr. Morrow is responsible for the utilities' largest customers, including electric generators, wholesalers and the large commercial and industrial customers, including the natural gas vehicle market. In aggregate, those customers account for approximately 65 percent of total system gas deliveries on the combined utility systems and 38 percent of the electric load on the SDG&E system. He is also responsible for managing the company's pipeline and storage capacity products, energy efficiency programs and services for commercial and industrial customers, energy-services provider relations and technology development. Previously, Morrow was vice president of customer services and marketing in the Energy Transportation Services (ETS) business unit of SoCalGas.

Morrow began his career with SoCalGas in 1974 as an engineer and has held various positions in engineering, gas supply planning and acquisition, transmission and storage, distribution and customer operations, and marketing. Morrow holds a bachelor's degree in chemical engineering from California State Polytechnic University and a master's degree in chemical engineering from the University of California at Davis. He is a registered petroleum engineer.



Dr. Gerhard Schmidt, Vice-President – Research and Advanced Engineering at Ford Motor Company

Dr. Schmidt joined Ford Motor Company April 1, 2001. He leads a worldwide research organization based in Dearborn, Mich., and Aachen, Germany. Ford's research staff of approximately 1,300 scientists,

engineers and technicians is devoted to anticipating the technical needs of Ford Motor Company customers, providing innovative solutions to technical challenges, and incorporating those solutions into products and processes.

As head of the advanced engineering group, Dr. Schmidt also oversees the planning, development and implementation of Ford's top global technology objectives.

Prior to his arrival at Ford, Dr. Schmidt served as senior vice president Vehicle Integration at BMW AG and spent 10 years as senior vice president Powertrain Development for the German automaker. During his 21 years at BMW, Dr. Schmidt held a wide range of leadership roles in engine research and development.



Ben Knight, Vice President, Automotive Engineering at Honda R & D Americas

Mr. Knight's current activities and responsibilities include the planning and implementation of Honda's environmental product efforts and programs for both gasoline and alternative fuel vehicles, including Honda's U.S. Fuel Cell Vehicle (FCV) program. Other programs include Honda's Low Emission (gasoline) Vehicle lineup (LEV-SULEV/PZEV), the Hybrid-Electric Vehicle (HEV) programs, and Alternative Fuel Vehicle (AFV) programs for Natural Gas Vehicles (NGVs), Electric Vehicles (EVs), in addition to the hydrogen-fueled Fuel Cell Vehicles. In his career at Honda R&D that began in 1976, Mr. Knight has managed market and technology research, and product planning for new vehicle models in Honda's U.S. product line.

Ben served on the U.S. Federal Advisory Committee on Personal Vehicle Greenhouse Gas Reductions in 1994-1995. Currently, he represents Honda on the California Fuel Cell Partnership Steering Committee, and also in the Study of Extremely Low Emission Vehicles (SELEV) research program at UC Riverside, CE-CERT and on the Coordinating Research Council Board (CRC).

Mr. Knight received a Bachelor of Science degree from Stanford in Mechanical Engineering with Phi Beta Kappa honors in 1972, and a Masters degree in Business Administration from Stanford in 1974His career at Honda has paralleled the build-up of Honda's technical research and development activities based in North America.



Christoph Huss, Director of Science and Traffic Policy at the BMW Group

BMW Group's Christoph Huss, is the director of science and traffic policy with the BMW Group in Munich, where he has worked since 1983. From 1989 to 1991 Dr. Huss was the Product Information Manager

with BMW of North America. From 1997 to 2001 was as a representative of the executive committee for traffic and environment. Since July 1994, the engineering graduate has been a member of the committee for vehicle technology of the German road safety advice E.V. (DVR).



Joan Ogden, Associate Energy Policy Analyst, Institute of Transportation Studies , University of California, Davis

Dr. Joan Ogden is an Associate Professor in the Department of Environmental Science and Policy at the University of California, Davis. She is also an Associate Energy Policy Analyst at ITS-Davis. Dr. Ogden has been a researcher at Princeton since 1985, first at the Center for Energy and Environmental Studies and later at the Princeton Environmental Institute. Most of her work has involved technical and economic assessments of new energy technologies, primarily in the areas of hydrogen, fuel cells, renewable energy and energy conservation.

Steve Chalk, U.S. Department of Energy



Jon Slangerup, President and CEO of Stuart Energy

Mr. Slangerup joined Stuart Energy as President and Chief Executive Officer in August 2001 and was elected to the Company's Board of Directors in September 2001.

Prior to joining Stuart Energy, Mr. Slangerup was Chairman and CEO of Electron Economy, a private start-up company engaged in developing and marketing supply chain management software. From 1994 to 2000, Mr. Slangerup was President of FedEx Canada, during which time he and his team established FedEx as Canada's premier international courier service. From 1980 to 1994, Mr. Slangerup served in a number of key executive assignments at FedEx.



Jason Mark, Director of the Clean Vehicles Program at the Union of Concerned Scientists
Jason Mark researches advanced vehicle technologies and alternative fuels for the Union of Concerned
Scientists. He has authored several studies in the transportation and energy field, including two recent
UCS reports, *Greener SUVs: A Blueprint for Cleaner, More Efficient Light Trucks* and *Zeroing Out*

Pollution: The Promise of Fuel Cell Vehicles.

Before joining UCS in 1995, Jason worked as a consultant on transportation policy analysis and mobile source modeling. His experience also includes work at the National Renewable Energy Laboratory, where he focused on various renewable energy and transportation technologies, and the Center for Energy and Environmental Studies at Princeton University.

A native of Vermont, Jason developed an appreciation for the great outdoors early on. He holds a bachelor's degree in mechanical engineering from Princeton University and a master's in energy and resources from the University of California at Berkeley. A recognized expert on advanced vehicle technologies, Jason regularly appears on network news programs such as the *CBS Evening News* and in newspapers such as the *Washington Post* and the *Los Angeles Times*.



Roland Hwang, Senior Policy Analyst at the Natural Resources Defense Council
Roland Hwang is a senior policy analyst in NRDC's energy program and works on transportation energy issues out of NRDC's San Francisco office. Prior to joining NRDC, Roland was the director of the Transportation Program for the Union of Concerned Scientists in its Berkeley, Calif., office. He holds a master's degree in mechanical engineering from the University of California at Davis, as well as a master's in public policy from the University of California at Berkeley.



Al Weverstad, Director for Mobile Emissions and Fuel Efficiency, Public Policy Center for General Motors Corporation.

Mr. Weverstad began his GM career in 1971 in the engineering areas with the Pontiac Motor and Marine Engine Divisions. In 1991, Mr. Weverstad moved to the Environmental Activities Staff, which is now the Public Policy Center.



Professor Scott Samuelson, Director of the National Fuel Cell Research Center at the University of California, Irvine

Dr. Samuelson is interested in energy conversion, fuel cells, combustion, fuel sprays, laser diagnostics, air quality, turbulent transport, alternative fuels, the modeling of reacting flows, practical energy systems, and the conflict between energy and the environment.

Dr. Samuelsen's current research activity focuses on energy generation, distribution and utilization, and includes the production of electricity, motive power and propulsive power from both fuel cells, gas turbines and hybrids of both. His work also explores the environmental impact of these energy systems, the dynamic between energy generation and atmospheric quality, and the development of environmentally preferred, high-efficiency energy generation integrated into buildings and building complexes.

Dr. Samuelsen directs the Advanced Power and Energy Program (APEP), which encompasses the National Fuel Cell Research Center (NFCRC), the UCI Combustion Lab (UCICL) and the Pacific Consortium on Energy and the Environment (PARCON).

His work at the UCICL is directed toward the development of advanced stationary gas turbine power systems. Research at the NFCRC is leading the evolution of power generation fuel cells, and the PARCON accelerates the development and deployment of advance energy systems around the world.



Luis Arteaga, Executive Director, Latino Issues Forum

The Latino Issues Forum is a public policy forum dedicated to improving the lives of Latinos by producing high quality research, conducting community education forums, building coalitions, serving as a resource to media; and hard hitting advocacy. Mr. Arteaga is a public policy specialist in housing, urban development, transportation and health issues. He formerly worked with the Los Angeles County Department of Health Services.